

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of claims:**

1. (Previously presented) A fluid ejection cartridge for dispensing a bioactive fluid onto an ingestible sheet, comprising:

a first reservoir containing the bioactive fluid; and

a first fluid ejector fluidically coupled to said first reservoir, wherein said first fluid ejector is configured to eject, essentially in a drop wise manner, at least a drop of the bioactive fluid onto the ingestible sheet.

2. - 5. (Cancelled)

6. (Previously presented) The fluid ejection cartridge of claim 1, further comprising:

a second reservoir containing a barrier component in proximity to said first reservoir and said second reservoir; and

a second fluid ejector fluidically coupled to said second reservoir, wherein said second fluid ejector for dispensing said barrier component.

7. (Previously presented) The fluid ejection cartridge of claim 6, wherein said first reservoir, said second reservoir, said first fluid ejector, and said second fluid ejector are formed as an integral replaceable unit.

8. (Original) The fluid ejection cartridge of claim 1, further comprising an information storage element coupled to a controller having at least one parameter of the bioactive fluid that is communicable to said controller.

9. (Original) The fluid ejection cartridge of claim 8, wherein said information storage element further comprises at least one parameter of said first fluid ejector that is communicable to said controller.

10. (Previously presented) The fluid ejection cartridge of claim 1, wherein the volume of the fluid, of said at least one drop, is in the range of from about ten femto-liters to about ten micro-liters.

11. (Previously presented) A bioactive fluid dispensing system for manufacturing a pharmaceutical dose on an ingestible sheet comprising:  
at least one fluid ejection cartridge of claim 1;  
a drop-firing controller activates said first fluid ejector to eject at least one drop of the bioactive fluid onto a first portion of the ingestible sheet; and  
a sheet advancer for advancing the ingestible sheet, wherein said sheet advancer and said drop-firing controller cooperate to dispense the bioactive fluid on a second portion of the ingestible sheet.

12. (Original) The bioactive fluid dispensing system of claim 11, wherein said first portion and said second portion are non-overlapping.

13. (Original) The bioactive fluid dispensing system of claim 11, wherein said first portion and said second portion are separated by a perforation.

14. (Original) The bioactive fluid dispensing system of claim 11, wherein said first portion and said second portion form a first dosage form and a second dosage form.

15. (Previously presented) The bioactive fluid dispensing system of claim 11, further comprising a heater, wherein at least a portion of a solvent dispensed with the bioactive fluid on the ingestible sheet is evaporated.

16. (Previously presented) The bioactive fluid dispensing system of claim 11, wherein said sheet advancer and said drop-firing controller cooperate to dispense the bioactive fluid in a two dimensional array on said first portion of the ingestible sheet.

17. (Previously presented) The bioactive fluid dispensing system of claim 16, wherein said sheet advancer and said drop-firing controller cooperate to dispense the bioactive fluid in a two dimensional array on said second portion of the ingestible sheet.

18. (Previously presented) The bioactive fluid dispensing system of claim 11, further comprising a sheet tray holding at least one sheet of the ingestible sheet.

19. (Original) The bioactive fluid dispensing system of claim 11, further comprising an image acquisition system.

20. (Previously presented) A bioactive fluid dispensing system for manufacturing a pharmaceutical dose on an ingestible sheet comprising:  
at least one fluid ejection cartridge of claim 6;  
a drop-firing controller configured to activate said first fluid ejector, and said second fluid ejector, to eject at least one drop of the bioactive fluid onto a first portion of the ingestible sheet, and to eject at least one drop of said barrier material over said at least one drop of the bioactive fluid; and  
a sheet advancer configured to advance the ingestible sheet, wherein said sheet advancer and said drop-firing controller dispense the bioactive fluid, and said barrier material on a second portion of the ingestible sheet.

21. (Previously presented) The bioactive fluid dispensing system of claim 20, wherein said sheet advancer and said drop-firing controller dispense the bioactive fluid, and said barrier material in a two dimensional array on said first portion of the ingestible sheet.

22. - 23 (cancelled)

24. (Previously presented) The bioactive fluid dispensing system of claim 20, wherein said sheet advancer and said drop-firing controller dispense the bioactive fluid, and said barrier material in a two dimensional array on said second portion of the ingestible sheet.

25. (Previously presented) The bioactive fluid dispensing system of claim 20, further comprising:

at least one heater to evaporate at least a portion of a solvent on the ingestible sheet after the bioactive fluid and said barrier material have been dispensed onto said first portion of the ingestible sheet.

26. (Original) The bioactive fluid dispensing system of claim 20, further comprising a position controller coupled to said sheet advancer.

27. (Previously presented) The bioactive fluid dispensing system of claim 26, wherein said drop-firing controller and said position controller are coupled to a memory device that provides operating instructions to form a two-dimensional array of dispensed bioactive fluid drops on said first portion of the ingestible sheet.

28. (Previously presented) The bioactive fluid dispensing system of claim 20, further comprising a sheet tray holding at least one sheet of the ingestible sheet.

29. (Original) The bioactive fluid dispensing system of claim 20, further comprising an image acquisition system.

30. (Original) The bioactive fluid dispensing system of claim 20, wherein said image acquisition system further comprises a camera and a light source, wherein said camera and said light source are disposed in a carriage containing said at least one fluid ejection cartridge.

31. (Previously presented) A bioactive fluid dispensing system for manufacturing a pharmaceutical dose on an ingestible sheet, comprising:  
at least one fluid ejection cartridge including:  
a first reservoir containing the bioactive fluid;  
a first fluid ejector fluidically coupled to said first reservoir;  
a drop-firing controller electrically coupled to said first fluid ejector, said drop-firing controller configured to activate said first fluid ejector to eject, essentially in a drop wise manner, at least one drop of the bioactive fluid onto a first portion of the ingestible sheet; and  
a sheet advancer configured to advance the ingestible sheet to a second portion of the ingestible sheet, wherein said drop-firing controller configured to dispense the bioactive fluid on said second portion of the ingestible sheet.

32. (Original) The bioactive fluid dispensing system of claim 31, wherein said first portion and said second portion are non-overlapping.

33. (Cancelled)

34. (Previously presented) The bioactive fluid dispensing system of claim 31, wherein said sheet advancer and said drop-firing controller dispenses the bioactive fluid, in a predetermined pattern on said first portion of the ingestible sheet.

35. - 36. (Cancelled)

37. (Previously presented) The bioactive fluid dispensing system of claim 31, wherein said first portion and said second portion form a first dosage form and a second dosage form.

38. (Previously presented) The bioactive fluid dispensing system of claim 31, further comprising a processor coupled to said drop-firing controller, said processor converts a specified quantity of said bioactive fluid to be ejected onto said ingestible sheet into a number of ejections.

39. (Previously presented) The bioactive fluid dispensing system of claim 38, further comprising:

a storage device coupled to said processor said storage device stores user input information; and

a display device displays said user input information.

40. (Original) The bioactive fluid dispensing system of claim 38, further comprising a signal receiver coupled to said processor and coupled to an external communication network, wherein said signal receiver receives a signal from a remote signal source specifying said quantity of said bioactive fluid to be ejected onto said ingestible sheet.

41. (Previously presented) The bioactive fluid dispensing system of claim 40, further comprising:

a processor for a health care provider having a provider interface;

a user interface coupled to said processor; and

a network connection to said user interface and to said provider interface,

wherein a user requests information on the bioactive fluid from said health care provider, and said health care provider sends information on the bioactive fluid to said user.

42. (Original) The bioactive fluid dispensing system of claim 41, wherein said network connection further comprises a wireless network coupled to said user interface and said provider interface.

43. (Previously presented) The bioactive fluid dispensing system of claim 31, wherein the volume of the fluid, of said at least one drop, is in the range of from about ten femto-liters to about ten micro-liters.

44. (Original) A dosage form containing an ingestible sheet produced by the bioactive fluid dispensing system of claim 31.

HEWLETT-PACKARD COMPANY  
Legal Department, IPA Section, ms: 35  
P O BOX 272400  
Fort Collins, CO 80528-9599

PATENT APPLICATION

Attorney Docket No: 10019978-4  
Application No. 10/760,078

45. - 54. (Cancelled)